DOCUMENT RESUME

ED 337 741 CG 023 736

AUTHOR Lau, DeeAnne Karyl
TITLE Bulimia Nervosa: A Review of Family Characteristics.
PUB DATE Sep 91
NOTE 66p.; Doctoral Research Paper, Biola University.
PUB TYPE Dissertations/Theses - Practicum Papers (043) -- Information Analyses (070)

EDRS PRICE MF01/PC03 Plus Postage.
DESCRIPTORS Anorexia Nervosa; *Bulimia; Family (Sociological Unit); *Family Characteristics; *Family Problems; *Family Relationship; Family Structure
IDENTIFIERS Family Systems Theory

ABSTRACT

The purpose of this literature review was to demonstrate that a family systems conceptualization of family dysfunction could be applied to bulimic families. In general, self-report and observational family characteristics studies support the hypothesis that bulimic families, like anorectic families, have significant systemic dysfunction in comparison with normal families. However, bulimic families appear to differ from a tightly-knit, rigid, and conflict-avoidant psychosomatic family model that typifies anorectic families. Instead, bulimic families are perceived as disorganized; that is, lacking in effective controls and strategies for coping with problems and change. They are also perceived as being conflict-escalating. Problem solving and communication are perceived to be impaired. Finally, bulimic families appear to be ambivalently enmeshed. In tasks, roles, and behaviors, members are seen as enmeshed. However, in emotional expression and support, members are viewed as disengaged. Future research in family characteristics as they relate to bulimia nervosa needs to improve in quality. It will require the use of appropriate controls, standardized measures, standardized diagnostic categories, multiple vantage points, and longitudinal studies to determine the effect of early parenting styles versus autonomous, constitutional factors on the development of eating disorder in an individual. (ABL)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED337741

BULIMIA NERVOSA: A REVIEW OF FAMILY CHARACTERISTICS

A Doctoral Research Paper

Presented to

the Faculty of the Rosemead School of Psychology

Biola University

In Partial Fulfillment

of the Requirements for the Degree

Doctor of Psychology

by

DeeAnne Karyl Lau

September 1991

CG023736

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

☒ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

DeeAnn K. Lau

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

BEST COPY AVAILABLE

BULIMIA NERVOSA: A REVIEW OF FAMILY CHARACTERISTICS

by

DeeAnne Karyl Lau

APPROVED:

John E. Kelley, Ph.D. Date 9/30/91
First Reader

Second Reader Date 9/30/91

APPROVED:

Dean

9/30/91
Date

Copyright © 1991 by DeeAnne Karyl Lau

ABSTRACT

BULIMIA NERVOSA: A REVIEW OF FAMILY CHARACTERISTICS

by

DeeAnne Karyl Lau

Bulimia nervosa is a serious public health problem. Clinical case reports have suggested familial dysfunction as a factor in the occurrence and maintenance of bulimia nervosa. This review examines bulimic familial characteristics in support of the hypothesis that familial factors impact the development and/or maintenance of bulimia nervosa. It is suggested that bulimia and anorexia are closely related and that the family research that applies to one can apply to the other, although specific family interventions may have to be tailored for the differences that do exist between the disorders. The review concludes that the research that does exist is lacking in quantity and in quality. Guidelines for future research are presented.

TABLE OF CONTENTS

PAGE

LIST OF TABLES vi

DOCTORAL RESEARCH PAPER

Introduction 1

Defining Bulimia Nervosa 3

Diagnostic Criteria 3

Epidemiology 4

Associated Features 6

Bulimia Nervosa and Anorexia Nervosa Compared 8

Diagnostic History 9

The Spectrum Concept 9

Similarities Between Bulimia Nervosa and Anorexia Nervosa 10

Differences Between Bulimia Nervosa and Anorexia Nervosa 11

Advantages to the Spectrum Approach 12

The Boundary Model of Eating 13

Bulimic Family Relationships: Theory and Research 14

Preliminary Indicators of Family Dysfunction in Bulimia 14

Family Therapy Theory 16

Family Therapy Theories of Anorexia Nervosa 16

Current Family Theories of Bulimia Nervosa 17

Empirical Family Studies 19

Self-Report Studies 25

Subject self-report data 26

Subject and family members self-report data 33

PAGE

Summary 37

Behavioral/Observational Studies 37

Summary 43

Discussion 43

REFERENCES 51

LIST OF TABLES

PAGE

Table 1. Summary of Family Relationships Research 1987-1990 20

BULIMIA NERVOSA: A REVIEW OF FAMILY CHARACTERISTICS

Introduction

Bulimia nervosa is a serious public health problem in the United States and other industrialized societies. It is more common than, and frequently occurs with, a related disorder, anorexia nervosa. Nonetheless, it is not easily identified because those who suffer from it hide it very well. Mental health professionals need to know what contributes to the development and maintenance of this disorder and how best to intervene.

At present, there is no single theory of etiology and pathogenesis for eating disorders. Given the lack of specificity of currently available biological interventions, psychological treatment approaches are still the most important and effective intervention methods for bulimia nervosa. Many authorities believe that various maladaptive developmental learning experiences and pathological family patterns contribute to the occurrence of eating disorders and may hold a key to treatment approaches (Yager, 1989).

Although some bulimics are able to easily stop their maladaptive behaviors, family therapists believe that those who find it difficult to stop come from families that somehow support their disorder (Root, Fallon, & Friedrich, 1986). Yet, while the role played by familial factors in the

etiology and treatment of bulimia nervosa excites much theoretical interest, empirical data are fragmentary. Most ideas about the nature and extent of this role are highly speculative. Family treatment studies are few and only in the early stages (Strober & Humphrey, 1987). Nonetheless, family systems conceptualization and treatment of the related disorder anorexia nervosa have been found to be effective (Gurman & Kniskern, 1971/1978; Gurman, Kniskern, & Pinsof, 1986; Minuchin, Rosman, & Baker, 1978). A question remains, however, as to the applicability of anorexia research to bulimia.

Unfortunately, diagnostic and methodological difficulties in family research of bulimia nervosa prevent clear interpretation of the results. First, there is a lack of generally accepted diagnostic criteria to classify bulimia. Second, it is unclear whether bulimia nervosa and anorexia nervosa are different syndromes or two sides of the same coin. Most eating disorder studies have included both without distinguishing them from each other. Third, studies typically sample bulimics who are in treatment, which may bias research results. These bulimics may be more pathological than, or otherwise different from, their less studied counterparts who never seek treatment. Finally, measures of family dysfunction are cross-sectional, correlational, and do not distinguish bulimic families from other families in which at least one member is receiving psychiatric treatment (Kent & Clopton, 1988).

Reviews of the literature for family contributions and treatment of bulimia nervosa up to mid-1987 have been published (Kog & Vandereycken, 1989b; Strober & Humphrey, 1987). This review will concern itself with the more recent literature since 1987. It will cover diagnostic criteria, epidemiology, associated features, and similarities and differences between bulimia nervosa and anorexia nervosa. Through review of empirical studies of the characteristics of bulimic families, the author will attempt to demonstrate that a family systems conceptualization of the etiology and maintenance of bulimia nervosa is useful and measurable, just as it is for anorexia nervosa.

Defining Bulimia Nervosa

Bulimia nervosa has not always been clearly differentiated from anorexia nervosa in research and clinical literature. A clinical diagnosis of bulimia nervosa relies on standard diagnostic criteria. However, epidemiology and associated behaviors sometimes overlap with anorexia nervosa. It is useful to develop a clear definition of bulimia nervosa while recognizing its possible interactive relationship with anorexia nervosa.

Diagnostic Criteria

The Diagnostic and Statistical Manual of Mental Disorders, Third Edition, Revised (DSM III-R) (American Psychiatric Association, 1987) describes bulimia nervosa as

an eating disorder manifested by recurrent eating binges (over-consumption of food); awareness that eating is out of control; purging behaviors to prevent weight gain, such as self-induced vomiting, use of laxatives or diuretics, strict dieting or fasting, or vigorous exercise; and obsession with body shape and weight. There is often associated dysphoria, and weight may fluctuate as much as 10 pounds, usually within the normal range. A minimum average of two binge eating episodes per week for at least three months is required for a DSM III-R diagnosis of bulimia nervosa.

At one time, bulimia nervosa was considered a subtype of anorexia nervosa. Eating disorders research often combined the diagnostic categories of bulimia nervosa and anorexia nervosa ignoring the differences between the disorders. Anorexia nervosa is distinguished from bulimia nervosa by severe weight loss due to fasting, excessive exercise, or purging behaviors. DSM III-R criteria include having body weight 15% below that expected for age and height, intense fear of becoming fat despite being underweight, disturbed body image, such as feeling fat even when emaciated, and amenorrhea (American Psychiatric Association, 1987).

Epidemiology

Binge eating occurs in 26%-79% of the female population and in 41%-60% of the male population. When DSM-III and purging behavior criteria are applied, the number identified as bulimic drops to 1%-5% of women and fewer than 1% of men.

Researchers have found that the incidence of bulimia is increasing, and that patients presenting for treatment are more impaired than in the past (Mitchell & Eckert, 1987; Mitchell, Soll, Eckert, Pyle, & Hatsukami, 1989; Shisslak, Crago, Neal, & Swain, 1987).

It was previously believed that eating disorders occurred only in young adolescent Caucasian women of higher socioeconomic status (SES) and educational backgrounds. While bulimia is primarily a female disorder, there are reports of eating disordered males with similar presentations. Increasing incidence among minority women is believed to be related to acculturation and increasing SES. Recent studies have found that bulimia and anorexia nervosa can occur at any age. It now appears that the condition cuts across SES, racial, intellectual, gender and age boundaries (Bulik, 1987; Foehrenbach & Lane, 1989; Holden & Robinson, 1988; Hsu, 1987; Larocca & Goodner, 1988; Martin, 1989a; Mitchell & Eckert, 1987; Mitchell, Hatsukami, Pyle, Eckert, & Soll, 1987; Schneider & Agras, 1987).

Risk factors for bulimia nervosa include being female, reaching adolescence/puberty, being in the middle- to upper-class, having an extraverted and impulsive personality structure, having psychopathology present in the family, having a constitutional predisposition, experiencing sociocultural pressures to be thin, participating in excessive dieting, having victimization experiences, and abusing substances (Bulik, Sullivan, & Rorty, 1989; Root,

1989; Root & Fallon, 1989; Shisslak et al., 1987; Yeary & Heck, 1989). However, as demographic variables change, so will the risk factors.

Bulimia nervosa most often occurs in women, with the average age of onset being 18 years. Binge eating is often preceded by a diet, and, if it occurs, vomiting usually starts approximately one year later. Bulimics usually have symptoms 4-5 years before seeking treatment. Although symptoms often wax and wane with time, usually it takes 5-6 years of treatment for symptoms to abate (Thelen, Farmer, Mann, & Pruitt, 1990).

Between 30% and 50% of anorexia nervosa patients will develop bulimia nervosa during their disorder. Bulimia nervosa is more common than anorexia nervosa, and it tends to occur in older adolescence and early adulthood while anorexia tends to peak in early adolescence. Bulimics tend to have a higher premorbid weight than anorectics with premorbid obesity being more common, and bulimics tend to be more impulsive than anorectics (Martin, 1989a).

Associated Features

Associated features of bulimia nervosa include bingeing, vomiting, laxative abuse, chewing and spitting out food, alcohol and drug abuse or dependency, affective disorder, suicide attempts, loneliness, feelings of alienation, boredom, anger, negative body image, interpersonal conflicts, elevated scores on psychopathology measures (e.g., elevated

MMPI neurotic and psychotic scales; elevated Hopkins Symptom Checklist Somatization, Obsessive-Compulsive, Depression, and Anxiety scales), perfectionistic strivings, idealized femininity, assertion problems, sexual problems, negative body image, sense of being controlled by perceived superior others, external locus of control, impulsivity, poor self- and other-differentiation, and low ego strength. Bulimics often have personality disorder diagnoses, usually Borderline (most common), Histrionic, Narcissistic, or Antisocial. In addition, bulimics tend to be more self-critical but experience lower levels of efficacy, use less non-food-related self-nurturance, react more to negative events, and react less to positive events than anorectics or normals. Home life is often chaotic, and family communication is frequently poor (Attie & Brooks-Gunn, 1989; Kent & Clopton, 1988; Lehman & Rodin, 1989; Martin, 1989a; Mitchell & Eckert, 1987; Piran, Lerner, Garfinkel, Kennedy, & Brouillette, 1988; Prather & Williamson, 1988; Rybicki, Lepkowsky, & Arndt, 1989; Sansone, Fine, Seuferer, & Bovenzi, 1989; Strauss & Ryan, 1987; Thelen et al., 1990; Vandereycken, 1990; Yeary & Heck, 1989).

However, many of these features may be the result of the disordered eating behaviors themselves rather than of psychopathology. Kaplan and Woodside (1987) and Keys et al. (cited in Garner, Rockert, Olmsted, Johnson, & Coscina, 1985) described the physical, emotional, cognitive, and behavioral complications of bulimia nervosa that can occur as a direct

result of starvation, bingeing, or purging behaviors. These include emaciated appearance, increased hunger, constipation, menstrual irregularities, growth retardation, lowered basal metabolic rate, vomiting, laxative dependence, preoccupation with food, binge eating, depression, extreme mood lability, exaggeration of premorbid personality traits, hoarding of food and nonfood items, MMPI scale elevations, impulsive behaviors, and withdrawal and isolation.

It must be remembered that normal weight bulimics may be biologically starved, i.e., below a naturally higher than average premorbid weight. The effects of biological starvation may last up to one year following resolution of the illness. Thus, psychological treatment alone, without weight restoration and alteration of the dysfunctional attitudes toward weight, body shape, and eating, is rarely effective (Garner et al., 1985; Kaplan & Woodside, 1987). Often, eating disordered people have medical illnesses or complications to their disorder that require treatment but which may go undiagnosed and therefore untreated (Hall et al., 1989).

Bulimia Nervosa and Anorexia Nervosa Compared

While clear cases of bulimia nervosa and anorexia nervosa can be differentiated behaviorally, overlapping and switching between the disorders is not uncommon. Possible underlying similarities point to a more complicated picture.

Diagnostic History

The first anorexia nervosa case report was in the late 1600s. The disorder was thoroughly documented in the late 19th century. The 20th century was marked by attempts to explain the disorder. A companion disorder, bulimia nervosa, was often identified as a subtype of anorexia nervosa (Anderson, 1983). Bulimia, "ox hunger," currently suggests compulsive or binge eating. However, binge eating has existed for millennia dating back to the time when primitive tribes would overeat when hunting and fishing catches were good and would be forced to fast when no food was available. For the Romans thousands of years ago, the culturally sanctioned habit of gorging on delicacies led to the use of vomitoria so that those who over-indulged could relieve their discomfort and return for more food (Martin, 1989a). A recent review of the history of bulimia showed that bulimia was reported clinically as early as the second century A.D. At that time it was clearly identified as a separate entity from anorexia nervosa (Stein & Laakso, 1988). Over time, the relationship between the two diagnostic categories has been debated.

The Spectrum Concept

"The spectrum concept suggests the existence of a closely related set of disorders with one or more fundamental underlying unifying features" (Anderson, 1983, p. 15). It has been suggested that anorexia nervosa and bulimia nervosa lie along a continuum of eating problems that represent a

spectrum disorder. The eating disorder continuum has anorexia at one end, bulimia in the middle, and compulsive overeating (bingeing without purging) at the other end.

The strongest evidence that anorexia nervosa and bulimia nervosa are part of a single spectrum comes from the similarities of their natural histories and the two-way transition that can occur between these clinical states (Anderson, 1983; Holmgren et al., 1983; Yeary & Heck, 1989). The central psychopathological feature of both is fear of fatness from a loss of control of eating and an unrealistic pursuit of thinness (Anderson, 1983). This has also been described as an Anorectic-Bulimic-Conflict-model (ABC-model) that groups all the patients together by focusing on the core of their problems: the subjective conflict between anorectic efforts to lose weight and bulimic impulses threatening to thwart these strivings (Holmgren et al., 1983).

Similarities Between Bulimia Nervosa and Anorexia Nervosa

Further support for the spectrum theory can be derived from similarities shared by bulimia nervosa and anorexia nervosa in the following areas: epidemiology, natural history, psychopathology, social patterns, family characteristics, biological complications, presentation, and treatment. The incidence of both syndromes increases with higher SES, 80%-95% are female, and there are increased rates of depression and eating disorders in patients' families. Both syndromes occur in all degrees of severity, and each can convert to the other with chronicity. In both there is a

high incidence of personality disorders. Both are marked by a fear of fatness from loss of control of eating, poor identification of emotions (alexithymia), and guilt. Both are faulty solutions for coping. Their social patterns are regressed and isolated. Families with both disorders tend to harbor guilt and anxiety, acutely; anger and demoralization, chronically. Menstrual periods are absent or irregular in both syndromes, and endocrinopathy is proportional to weight loss. In both, presentation is often disguised as secondary symptoms. Treatment goals for both include weight normalization, a normal eating pattern, increased self-esteem, emotional growth, social maturity, and normal physiology. The length of treatment for both tends to last several years (Anderson, 1983).

Differences Between Bulimia Nervosa and Anorexia Nervosa

However, there are differences between the two syndromes. Anorexia nervosa tends to occur in only 1-3% of pre-college females, has a low weight criterion, and is found in a slightly younger population than for bulimics. Bulimia nervosa tends to occur in up to 19% of college females, has no weight criterion, and is found in a slightly older population than for anorexia. Psychopathologically, anorectics tend to be more obsessional and less aware of psychological distress, whereas bulimics tend to be more histrionic and more aware of psychological distress. Behaviorally, anorectics tend to be perfectionistic and immature; bulimics, on the other hand, may have a wide

variety of associated behavioral abnormalities such as stealing, drug use, and/or promiscuity. Death in anorectics is usually due to starvation (hypothermia, cardiac failure) while in bulimics it is usually due to potassium imbalance (hypokalemia) or suicide (Anderson, 1983).

Advantages to the Spectrum Approach

The advantage of using the spectrum approach to conceptualize anorexia nervosa and bulimia nervosa is that the clinician is prepared for the switches and overlaps between both disorders. Also, it explains why weight changes do not necessarily imply positive or negative changes in the patient's central symptomatology. In addition, treatment strategies can be streamlined within reason by applying similar interventions for both disorders. Prognostically, the eating disordered patient (anorectic or bulimic) would demonstrate an illness which "breeds true," that is, remains fundamentally the same in patients who relapse or who become chronic, despite switches between the disorders. Some researchers find that anorexia nervosa and bulimia nervosa only breed true if the spectrum hypothesis is used (Holmgren et al., 1983). There are several studies that support the spectrum hypothesis, either by demonstrating that the two syndromes are similar or that they only differ in degree of psychopathology (Kog, Vertommen, & Vandereycken, 1989; Prather & Williamson, 1988; Rybicki et al., 1989; Sansone et al., 1989; Shisslak, McKeon, & Crago, 1990; Stern et al.,

1989; Strauss & Ryan, 1987; Vanderheyden & Boland, 1987; Waller, Calam, & Slade, 1989).

However, other reviewers and researchers (Martin, 1989b; Swift, Ritholz, Kalin, & Kaslow, 1987) have disputed the idea that anorexia nervosa and bulimia nervosa are similar diagnostic entities by looking at the differences in natural histories and follow-up status. They find that anorexia nervosa and bulimia only "breed true" to themselves and not in combination with one another. Some find that there may need to be an additional category for patients who switch between the two diagnoses, and subtypes of each disorder are the focus of many studies (Hsu, 1988; Kog & Vandereycken, 1989a; Lehman & Rodin, 1989; Piran et al., 1988). These differences do not necessarily indicate that bulimia and anorexia are unrelated. Bipolar Disorder also has three different manifestations (Mixed, Manic, Depressed), but they all share core features along a continuum.

The Boundary Model of Eating

The spectrum concept does not account for normal eating. A complementary model is the boundary model of eating. In this model, normal eating is regulated by two physiological boundary states: hunger and satiety. Dieters and eating disordered people have a third artificial diet boundary which is independent of physiological signals. Research has shown that when this diet boundary is breached, the dietary chaos typical of bulimic patients can occur. With time, eating disordered people lose the ability to recognize hunger and

satiety signals. This results in hunger being perceived only when intense and satiety only with relatively enormous stomach loads (Polivy & Herman, 1987). Thus, to update the model, eating disorders can be seen as perversions of normal eating with deficits in perceiving appropriate internal signals. The expanded continuum would have anorexia on one end, compulsive overeating at the other end, normal eating in the middle, and bulimics shuttling back and forth between the extremes.

The author will focus on bulimia nervosa family research. If bulimia nervosa and anorexia nervosa are similar diagnostic entities, then the research that applies to one will apply to the other within reason.

Bulimic Family Relationships: Theory and Research

Family therapists and clinical descriptions of bulimics suggest family dysfunction as a factor in the development of bulimia nervosa. This has generated much research.

Preliminary Indicators of Family Dysfunction in Bulimia

Clinicians have found that poor therapeutic outcome for eating disorders is associated with dysfunctional family relationships, such as negative expressed emotion and parental critical comments (Hsu, 1988). This suggests family dysfunction as a maintaining force for eating disorders. Other indicators of family dysfunction in bulimia nervosa include clinical case studies and descriptive studies.

Clinical content analyses and the resulting theories have included familial dysfunction as a possible etiological factor (Boskind-White & White, 1987/1983; Bruch, 1973). For example, clinical content analysis of a psychodynamic group for nine bulimic women shed some light on the role of parents, especially the father, in the development of body-image, sense of adequacy, self-esteem, goals, and feminine identity (O'Neill & White, 1987). Fathers were presented as aggressive, domineering, and intellectually stimulating, encouraging their daughters' academic pursuits. They were, however, non-accepting and critical of them as young women. Mothers were described as supportive but self-sacrificing and self-effacing women in traditional marriages. The patients felt more secure in their mothers' acceptance but feared becoming like them. In other clinical reports, family problems are often noted in the family histories of bulimic women. These include sexual victimization and abuse, substance abuse, psychopathology, impulsive behaviors, and other chaotic family behaviors (Bulik et al., 1989; Piran et al., 1988; Root, 1989; Root & Fallon, 1989, Yeary & Heck, 1989).

Descriptive studies also suggest family dysfunction in eating disorders. Attie and Brooks-Gunn (1989) found that high compulsive eaters could be distinguished from low compulsive eaters on the basis of their lower levels of family cohesion, organization, and expressiveness, as reported by their mothers on the Family Environment Scale.

Perednia and Vandereycken (1989) interviewed and administered questionnaires to families of eating disordered patients. Parents reported that the disorder had a negative impact on family life, that they had been too indulgent, and that they felt the patient had always been different from her siblings. Mothers were often in a central position in the families with fathers regularly absent. Both parents also reported marital dissatisfaction and psychoneurotic complaints. Patients perceived parents as being different in parenting styles.

Although these clinical descriptions are interesting and provoke tantalizing questions about the impact of family dynamics on eating disorders, they need the support of empirical research. The empirical data are reviewed below. First, however, the theory underlying eating-disordered family research must be outlined.

Family Therapy Theory

Family therapy for bulimia nervosa has developed from theories used to explain the origin of anorexia nervosa.

Family Therapy Theories of Anorexia Nervosa

In the United States during the 1970s, Minuchin conceptualized his well-known theory of the psychosomatic family as having five characteristics. The five characteristics are: enmeshment, overprotectiveness, rigidity, poor conflict resolution, and triangulation. Enmeshment is an extreme form of proximity and intensity resulting in poorly differentiated subsystem boundaries.

Overprotectiveness refers to highly intensive family interactions where the members have great concern for each other and protect each other from criticism and family tension. Rigidity aims to maintain the status quo at all costs. Poor conflict resolution results from the avoidance or outright denial of conflicts. Involvement of the child in unsolved marital and family conflicts, or triangulation, insulates adults from assuming proper responsibility (Minuchin et al., 1978; Vandereycken, 1987; Vanderlinden & Vandereycken, 1989).

At around the same time, Selvini-Palazzoli (1978) in Europe described similar dysfunction in the anorectic family: high degree of marital dysfunction, problems of leadership, rejection of communicated messages, poor conflict resolution, covert alliances, blame shifting, and extreme rigidity. Unfortunately, her 1974 data were preliminary because of a small sample size and a lack of follow-up data. Since then, there has been no follow-up report (Vanderlinden & Vandereycken, 1989).

Current Family Theories of Bulimia Nervosa

Bulimia family therapy research has been less extensive than anorexia family therapy research since bulimics tend to hide their disorder very well and often no longer live at home when presenting for therapy. Most current theories of bulimia are reconceptualizations of family therapy with anorexia nervosa. Family therapists have mentioned some differences between bulimic and anorectic families, e.g.,

greater resistance to change and better outcome if the patient is enabled to successfully differentiate and launch from her family during therapy. Isolation, consciousness of appearance, and special meaning attached to food are additional factors thought to be characteristic of bulimic families (Lieberman, 1989; Schwartz, 1987; Vandereycken, 1987; Vanderlinden & Vandereycken, 1989).

Descriptive studies reviewed by Strober and Humphrey (1987) have suggested that dysfunctional family relationships appear frequently in association with the development and persistence of bulimia nervosa. These dysfunctional relationships are often accompanied by signs of individual psychopathology in parents. Bulimics as well as their parents perceive their family environments as more conflictual and disengaged and as less cohesive and nurturant than normal control subjects. Laboratory studies of family interaction have suggested that bulimic families are enmeshed, intrusive, hostile, and negating of the child's emotional needs. There is some conflicting evidence whether bulimic families are enmeshed, disengaged, or both.

In summarizing their review of the literature, Strober and Humphrey (1987) found that there are distinctively different patterns of family interaction between bulimia and nonbulimic subtypes. Bulimia appears to be strongly associated with a lack of parental affection and overly negative, hostile, and disengaged patterns of family interaction. Deficits in bulimics' self-efficacy and self-

regulation may stem from such an inadequate and adverse family environment within which painful and disruptive affective states may occur. Innate vulnerabilities plus a poor family environment and external pressures to diet and to maintain a low body weight may result in the development and maintenance of bulimia nervosa.

The studies of family dysfunction have been of two kinds: self-report and observational. This present review now turns to the empirical family studies that show evidence for the existence of family dysfunction in families of eating disordered patients.

Empirical Family Studies

From 1987-1990, there have been 19 studies of family relationships in eating disorders as summarized in Table 1. Three are not reviewed because they lack a control group. A study by Attie and Brooks-Gunn (1989) is also excluded because they did not include full-criteria eating disordered subjects.

The remaining 15 studies all include comparison groups. The independent variable in each of these studies was diagnostic category. A common problem in these studies is that diagnostic groupings vary from study to study. In addition, nomenclature is different across studies. For the sake of clarity, the major diagnostic categories in this review are as follows. Bulimia nervosa, also known as normal weight bulimia, describes subjects with normal weight who

Table 1

Summary of Family Relationships Research 1987-1990

Studies	Subjects	Control Group	Other Family Member Data	Obs. Data	Family Assess. Device	Significant
Attie & Brooks-Gunn (1989)	193 White females and their mothers	Yes	mother	No	a, b	Yes
Humphrey (1987)	40 biologically intact family triads (father, mother, teenage daughter), 16 of which were bulimic-anorectic	Yes	parents	Yes	c	Yes
Kent & Clopton (1988)	76 university freshman females (26 bulimics, 15 subclinical bulimics, 35 controls)	Yes	No	No	a	No
Kog & Vandereycken (1989a)	60 intact families, 30 eating disordered (19 anorectic, 6 bulimic-anorectic, 5 bulimic), 30 non-clinical controls	Yes	parents, siblings	Yes	d	Yes
Kog, Vertommen, & Vandereycken (1987)	53 families of eating disordered patients (74% anorectic and bulimic-anorectic; 17% bulimic; 9% atypical)	No	parents, siblings	Yes	d	Yes

(table continues)

Table 1 (cont.)

Summary of Family Relationships Research 1987-1990

Studies	Subjects	Control Group	Other Family Member Data	Obs. Data	Family Assess. Device	Significant
Kog, Vertommen, & Vandereycken (1989)	53 families of eating disordered patients (anorectic, bulimic-anorectic, bulimic, and atypical) and 220 nonpatient controls	Yes	parents, siblings	No	d	Yes
Krueger & Bornstein (1987)	129 college women (17 bulimic, 13 binge eating, and 99 normal)	Yes	No	No	e	Yes
Lehman & Rodin (1989)	18 bulimic, 20 restrainer, 20 normal women	Yes	No	No	f, g	No
Perednia & Vandereycken (1989)	16 parent pairs of eating disordered children (13 anorectic, 3 bulimic)	No	parents	No	h, i, j	Yes
Piran, Lerner, Garfinkel, Kennedy, & Brouillette (1988)	68 inpatient eating disordered women (30 anorectic, 38 bulimic) ages 16-35 years	No	No	No	k	Yes
Pole, Waller, Stewart, & Parkin-Feigenbaum (1988)	56 female outpatient bulimics and 30 normal controls	Yes	No	No	h	Yes

(table continues)

Table 1 (cont.)

Summary of Family Relationships Research 1987-1990

Studies	Subjects	Control Group	Other Family Member Data	Obs. Data	Family Assess. Device	Significant
Rybicki, Lepkowsky, & Arndt (1989)	38 bulimic and 26 normal females	Yes	No	No	a	No
Scalf-McIver & Thompson (1989)	175 females aged 17-25 years who were within 20% of normal weight (bulimic and control)	Yes	No	No	a, l	Yes
Shisslak, McKeon, & Crago (1990)	24 normal weight bulimic, 13 bulimic-anorectic, and 41 normal control women	Yes	No	No	a, m	Yes
Stern, Dixon, Jones, Lake, Nemzer, & Sansone (1989)	114 women and a parent (20 anorectics, 13 bulimic-anorectics, 24 bulimics, 57 controls)	Yes	mother or father	No	a	Yes
Strauss & Ryan (1987)	19 anorectic, 14 bulimic-anorectic, and 17 control White women	Yes	No	No	a, c	Yes
Waller, Calam, & Slade (1989)	41 clinical eating disordered (12 with anorexia nervosa, 21 with bulimia nervosa, 8 with bulimia simplex) and 27 comparison women	Yes	No	No	e	Yes

(table continues)

Table 1 (cont.)

Summary of Family Relationships Research 1987-1990

Studies	Subjects	Control Group	Other Family Member Data	Obs. Data	Family Assess. Device	Sig-ni-fi-cant
Waller, Slade, & Calam (1990a)	41 clinical eating disordered women (12 with anorexia nervosa, 21 with bulimia nervosa, 8 with bulimia simplex) and 27 comparison women	Yes	No	No	n	Yes
Waller, Slade, & Calam (1990b)	48 intact families of clinical eating disordered (14 anorectics, 34 bulimics) and 30 intact comparison families	Yes	parents	No	e	Yes

[a]Family Environment Scale
[b]Self-Image Questionnaire for Young Adolescents Family Relationships Scale
[c]Structural Analysis of Social Behavior
[d]Leuven Family Questionnaire
[e]Family Assessment Device
[f]The Nurturance Rating Task
[g]Parental and self-descriptions
[h]Parental Bonding Instrument
[i]EMBU (an inventory to assess one's memories of parental rearing behavior)
[j]Maudsley Marital Questionnaire
[k]Childhood Events Questionnaire
[l]Parental Inconsistency of Love Scale
[m]Family Dynamics Survey
[n]Family Adaptability and Cohesion Evaluation Scale

binge and/or purge. A subtype, bulimia simplex, categorizes bulimics without a history of anorexia nervosa; however, this is a new category and most research places it in the bulimia category. Anorexia nervosa, also known as restricting anorexia nervosa, describes subjects with low weight and who do not binge or purge. Bulimic-anorexia nervosa describes subjects with low weight who also binge and/or purge.

The dependent variables were scores on assessment devices designed to measure family functioning and interaction. The data were obtained from three sources: subject self-reports, other family member self-reports, and behavioral/observational ratings. The majority of studies rely on subject self-report data, which reflects the subjects' perceptions of their families' functioning. However, it is debated whether such data can accurately portray actual family functioning since families involve more than one person. Yet, the inclusion of other family members' data and behavioral/observational data increases the complexity of interpretation of results, especially when perceptions conflict.

In general, the assessment devices utilized were not standardized. Nomenclature and scales may or may not overlap. This makes it difficult to compare results across studies. Although Minuchin's psychosomatic family is often cited as the theoretical background for eating disorder family research, few researchers adequately operationalized his concepts. For the purposes of this review, Minuchin's

concepts are defined based on descriptions by several researchers (Humphrey, 1987; Kog, Vertommen, & Vandereycken, 1987; Kog et al., 1989; Scalf-McIver & Thompson, 1989; Waller, Slade, & Calam, 1990a). Triangulation and poor conflict resolution appear to be similar categories and are collapsed into one called conflict. Conflict refers to the amount of openly expressed anger, aggression, and disagreement as well as failure to use methods of dealing with conflict, such as problem-solving, communication, and negotiation. The conflict concept can be seen as a continuum with conflict avoidance and conflict escalation at the poles. Enmeshment is the degree of concurrence on thoughts, feelings, and behaviors between family members.It is often called cohesion and boundaries in different studies. Its polar concepts are enmeshment and disengagement. Rigidity relates to the family's inability to organize set rules and procedures to run family life effectively, especially when facing change. It is often accessed by scales measuring control, adaptability or organization. Its two poles are rigidity and disorganization. Finally, overprotectiveness appears to be an overlapping concept with conflict and enmeshment, so it is collapsed into those concepts as appropriate.

Self-Report Studies

Self-report studies are the easiest, and, therefore, most common type of family characteristics research for

eating disorders. Thirteen of the fifteen studies reviewed use self-report data either from eating disordered subjects alone or in conjunction with their family members.

Subject self-report data. Subject self-report studies are the most common type of study. In this section, there are ten studies that are reviewed. Assessment devices varied from one study to another.

The most commonly used assessment device for measuring family functioning is the Family Environment Scale (FES). It is a 90-item true/false questionnaire with 10 subscales reflecting different aspects of family functioning: cohesion, expressiveness, conflict, independence, achievement orientation, intellectual-cultural orientation, active recreational orientation, moral-religious emphasis, organization, and control (Stern et al., 1989). Six studies used the FES, some with other assessment devices. Five of those studies are discussed in this section; one is discussed in the next section, i.e., Subject and Family Members Self-Report Data.

Scalf-McIver and Thompson (1989) studied 175 females aged 17 to 25 years and categorized as bulimic or normal by the Bulimia Test (BULIT). They were administered the Cohesion, Conflict, and Control scales of the FES. They were also administered the Parental Inconsistency of Love Scale, which measures the subject's perception of each parent's expression of affection toward her as variable or consistent during her growing up years. Eating disturbance was

positively correlated with parental inconsistency, for both parents, and was negatively correlated with family cohesion. The combined family variables accounted for a significant amount of variance in bulimic symptomatology, as well as factors associated with bulimia, e.g., depression, cognitive distortion, and dissatisfaction with physical appearance. Maternal inconsistency, in particular, accounted for a significant amount of the variance in bulimic behavior.

Shisslak et al. (1990) evaluated 24 bulimics without a history of anorexia nervosa, 13 bulimic-anorectics, and 41 normal control women on two self-report measures of family functioning, the FES and the Family Dynamics Survey (FDS). The FDS consists of items designed to measure family closeness, emotional support, independence, and quality of communication. On the FES, the bulimics and bulimic-anorectics perceived their families as displaying significantly less cohesion, expressiveness, and orientation toward recreational activities than did the normal control subjects. The bulimics' families also were perceived as having significantly more conflict than the control families. Bulimics perceived their families as having significantly less intellectual-cultural oriented activities than the control subjects perceived their families to have. On the FDS, the two bulimic groups perceived their families as less emotionally supportive, as needing counseling more, and as having significantly poorer communication than in control families. Bulimics did not differ from control families on

independence or family closeness, but bulimic-anorectics were significantly lower on both these scales.

In order to study autonomy disturbances in eating disorders, Strauss and Ryan (1987) administered the FES to 19 anorectic, 14 bulimic-anorectic, and 17 control White females. They were also administered the self-report version of the Structural Analysis of Social Behavior (SASB) which is described in more detail in the Behavioral/Observational Data section below. Both eating disorder groups showed less autonomy than controls on the SASB intrapsychic autonomy score. The FES scores showed that both eating disorder groups perceived less expressiveness and less cohesion in their families than did the control group. The authors found that the eating disorder groups exhibited a poorer family communication and certain family patterns that are antithetical to autonomy.

The FES studies generally found that, in comparison to normal families, bulimics perceived their families as disengaged, disorganized, and conflicted (uncohesive, controlling and needing counseling, poor communication). Of note is the perceived poor emotional expressiveness and inconsistent affection and support among family members. Curiously, bulimic families are perceived as both disengaged (uncohesive) and enmeshed (autonomy-restricting).

However, two FES studies found no significant results in regard to Minuchin's concepts. Kent and Clopton (1988) studied a nonclinical sample of 26 bulimics, 15 subclinical

bulimics, and 35 controls as measured by the BULIT. None of the subjects reported a history of treatment for eating disorders, and all were of normal weight. They were administered the FES. The groups did not differ significantly on any scales of the FES. The authors concluded that the interaction pattern reported in bulimics and their families may reflect their clinical status instead of preexisting dysfunctional family patterns. Thus, family interaction studies of clinically eating disordered may need to include non-eating-disordered clinical controls and nonclinical eating disordered groups to make meaningful comparisons.

Rybicki et al. (1989) administered the FES to 38 bulimic and 26 normal females. They found no significant differences between bulimics and normals using a multivariate test of significance. However, bulimics differed significantly from normals on the Emotional Expression Scale, Active Recreational Orientation Scale, and Moral & Religious Emphasis Scale when compared using a two-tailed *t* test. Except for significant differences on the Emotional Expression Scale, these results were not consistent with the results of other research using the FES. The authors posited population differences and/or differences in perceptual orientation to recounting details of subjects' families of origin as reasons for this contradiction.

There are two subject self-report studies that have utilized the McMaster Family Assessment Device (FAD). The

FAD assesses perceived family interaction on a scale of 1 to 4 with 4 being the most unhealthy. The FAD consists of a global scale of family functioning, General Functioning, and six dimensions. Problem Solving is defined as the family's style of resolving problems. Communication is the clarity of information given. The scale Roles refers to differentiation of tasks. Affective Responsiveness is the experience of emotion. Affective Involvement is concern for each other. Finally, Behavior Control is the clarity of rules (Waller et al., 1989).

Krueger and Bornstein (1987) studied 17 bulimic, 13 binge eating, and 99 normal college women as assessed by the BULIT. Subjects completed the FAD. One-way ANOVA yielded significant differences on two FAD scales: Communication and Roles. The findings suggested that roles and communication for bulimic families are significantly more dysfunctional than for normals.

Waller et al. (1989) administered the FAD to 41 clinical eating disordered women (12 with anorexia nervosa, 21 with bulimia nervosa, and 8 with bulimia simplex) and 27 comparison women. Generally, eating disordered women rated their family interaction as less healthy than comparisons, particularly the bulimia simplex group. Each scale showed significant differences between the comparison and clinical groups. Bulimic families were rated as poor in problem solving, behavior control, and affective involvement. Bulimia simplex sufferers rated their family interaction as

poorer than the comparison women's on all scales except behavior control. On the basis of FAD scores, it was easy to differentiate between eating disordered and non-eating disordered women; however, it was more difficult to distinguish between bulimic and anorectic women.

Thus, the FAD studies provide cross-sectional data to support Minuchin's theory that conflict (poor communication, poor problem solving), disorganization (poor control), boundaries, and emotional expressiveness are problems in eating disordered families. Again, the enmeshment (poor task differentiation) and disengagement confusion is present. It seems that there is role or behavioral enmeshment, but emotional disengagement. The last three studies in this section each used different assessment devices.

Lehman and Rodin (1989) studied 18 bulimic, 20 normal weight dieters, and 20 normal women. The subjects filled out the Nurturance Rating Task which consisted of 42 items assessing the degree of self-nurturance, perceptions of one's parents as nurturant, and the degree to which one's self and one's parents used food as a source of psychological nurturance. They also were asked to describe their mothers and their fathers on separate sheets of paper. Parental descriptions were rated on a 1 to 5-point scale for other-nurturance, other-appraisal, and efficacy/success. There were no significant differences on the measures of parental nurturance, criticism, and efficacy. The authors posited that the measures specific to this study may not be

appropriate for assessing family dysfunction and/or that the use of food to provide psychological nurturance is not unique to the bulimic's family.

Pole et al. (1988) studied 56 female outpatient bulimics and 30 normal controls using the Parent Bonding Inventory (PBI). The PBI is a self-report measure of perceived parental characteristics which has 12 "care" items and 13 "protection" items on which parents are scored from the subject's memories of her first 16 years of life. The subjects filled out the PBI on each parent, and the scores were averaged for each mother/father pair. The majority of bulimics in comparison with controls viewed their parents as low in caring but high in protection as opposed to "optimal bonding" (high care, low protection). For those bulimics who described their parents as providing high care, a significant number of these also reported high protection. The patients perceived an insufficiency of parental care, particularly from their mothers. On the other hand, patients tended to view fathers as overprotective. In Minuchin's terms, bulimic families were rated as behaviorally enmeshed and emotionally disengaged in a rigid and controlling manner (low care, high protection).

Waller et al. (1990a) administered the Family Adaptability and Cohesion Evaluation Scale (FACES II), a measure of family adaptability and cohesion, to 41 clinical eating disordered women (12 had anorexia nervosa, 21 had bulimia nervosa, and 8 had bulimia simplex). They sought to

examine whether perceived levels of adaptability and cohesion would be useful in distinguishing women with and without eating disorders. Eating disordered women perceived their families to be lower in both adaptability and cohesion than did the comparison group. The women with eating disorders also had a much greater range of perceived family interaction than did the comparison group.

Subject self-report studies have generally concurred that bulimics perceive their families as emotionally disengaged, behaviorally enmeshed, disorganized, and conflicted with poor conflict resolution skills. An important finding was that nonclinical bulimics and nonclinical normals may not differ in family functioning. The corollary is that studies of clinical bulimic families may need non-bulimic clinical control families to determine if there are family characteristics that uniquely characterize bulimic clinical families.

Subject and family members self-report data. There are three studies that utilized data from subjects and at least one member of their family of origin, usually a parent. Each family member was administered the same assessment device, and scores were averaged to give a family mean. The assessment devices utilized were the Leuven Family Questionnaire, the FES, and the FAD.

Kog et al. (1989) compared 53 families with an eating disordered member (anorectic, bulimic-anorectic, bulimic, and atypical) with 220 nonpatient control families. Each family

member still living at home filled out the Leuven Family Questionnaire, a 73-item self-report measure of conflict, cohesion, and disorganization.

The average scores of all family members were compared across groups. Patient families reported significantly more conflict and more disorganization than control families. This was also true when the eating disorders group was subdivided into diagnostic subtypes and when groups were matched for SES and phase of family life cycle. There was one exception. The higher the social class, the smaller were the differences between groups such that differences were no longer significant for the upper social class families.

The scores of the fathers, mothers, and patients of eating disorder families were compared to the scores of fathers, mothers, and eldest children of nonpatient families. As stated above, patient fathers did not differ from their normal counterparts, but patients and their mothers perceived higher conflict and higher disorganization in their families as compared to their normal counterparts. Parents of eating disorder families were more different in their perception of family interaction than normal parents. The researchers suggest that this represents a family dynamic in eating disorder families where the patient and her mother are close to each other while the parents are distanced, at least in perceptions of family interaction.

In summary, the tightly-knit family structure which clinicians report in observing eating disorder families was

not confirmed by family members' self-reports. Bulimic-anorectic and bulimic families had similar response patterns which were different from anorectic and control families. In eating disordered families, the patient and her mother have similar perceptions while the parents differ. However, this situation is also high in conflict and high in disorganization. In Minuchin's terms, the results point to bulimic-anorectic and bulimic families as having a rigid, disorganized family structure with conflict avoidance and coalitions. Of note are the findings that socioeconomic status can be a confounding factor in family interaction studies. As Minuchin developed his theories in working primarily with lower class families, it is possible that his psychosomatic family characteristics only apply to lower SES families.

Stern et al. (1989) administered the FES to 114 young women and a parent of each. Twenty subjects had anorexia nervosa, 13 had bulimic anorexia nervosa, and 24 had bulimia; 57 were age-matched controls. The only statistically significant difference among the three eating disorder groups occurred on a measure of achievement orientation. Parents of bulimic patients rated their families higher than parents of patients with bulimic anorexia nervosa. Similarly, bulimic families scored higher than anorectic families.

Means for subjects, parents, and families (derived by averaging the subjects and their parents' scores) in all four groups were compared. Bulimic-anorectic families were lower

in cohesion than controls. Anorectic, bulimic-anorectic, and bulimic families were lower in expressiveness than were controls. Bulimic-anorectic parents and families were higher in conflict than were controls. Bulimic parents and families were higher in achievement orientation than were controls. On achievement orientation, all eating disordered patients rated their families higher than did their parents; the reverse was true for control subjects.

The most significant finding was the tendency of eating disorder families to rate family members less supportive of each other, less encouraging of open expression of feelings, and more likely to have conflictual interactions than members of control families. Contrary to Minuchin's psychosomatic family characteristics, eating disorder families in this study perceived themselves as emotionally disengaged and conflictual. Again, poor emotional expression was noted.

Waller et al. (1990b) studied 48 clinical (14 anorectics, 34 bulimics) and 30 comparison families consisting of at least a daughter, a mother, and a father using the FAD. Eating disordered women perceived their families as less healthy than the comparison group on all six FAD scales. Mothers of eating disordered women rated their families as less healthy than comparison mothers on only two scales (affective responsiveness and affective involvement). For the fathers' ratings, there were no differences between groups on any scales. There were no significant differences among the two clinical groups. Describing these results from

Minuchin's perspective, eating disordered daughters perceived their families as emotionally disengaged, enmeshed in roles, disorganized, and poor in conflict resolution. Their mothers also perceived emotional disengagement in their families. As in the Kog et al. (1989) study, eating disordered daughters and their mothers shared some perceptions of family dysfunction while fathers did not.

Summary. Self-report studies have shown that bulimic families perceive themselves as emotionally disengaged, behaviorally enmeshed, disorganized, and conflicted when compared with normal families. Patients and their mothers tend to perceive these problems; their fathers do not. The question remains: Can outside observers also identify similar dysfunctional interactions?

Behavioral/Observational Studies

In this section, two studies are reported that involved direct observation of patient and control families' interactions under laboratory conditions. In the first, Benjamin's Structural Analysis of Social Behavior (SASB) was used to code interaction. In the second study, families were evaluated after participating in two semi-structured tasks, a decision-making task and a conflict-resolution task, which were coded dependent upon the written results of the tasks and observation of family interactions.

Humphrey (1987) studied 40 biologically intact family triads (father, mother, teenage daughter) 16 of which had a daughter diagnosed with bulimic-anorexia. They were

evaluated using the SASB. Family members filled out the self-report version and were rated on the observer version while being observed during a family discussion of the daughter's separation from her parents.

The SASB family interaction model proposes two grids corresponding to behavior that represents two foci: focus on Other and focus on Self. Each grid has two primary orthogonal axes: interdependence and affiliation. These grids can be operationalized at several related levels of detail. Humphrey used the octant level of SASB. Each grid is divided into eight vectors called clusters that indicate the varying degrees of interdependence and affiliation in any interpersonal event. Each cluster variable has a two-word label, and each cluster on the Other grid has a corresponding cluster on the Self grid. For example, the Other grid cluster 6, Belittling and Blaming, has as its complement the Self grid cluster 6, Sulking and Appeasing. In reporting her results, Humphrey used either of the words in an Other cluster label with either of the words in its complementary Self cluster label to refer to an interactional rating. Enmeshment was defined by clusters measuring the control/submission complementarity on the interdependence axis. This seems to be consistent with the behavioral enmeshment mentioned earlier. Clusters on the affiliation axis appears to be consistent with emotional enmeshment-disengagement.

In comparison with normal families, the families of bulimic-anorectics were expected to show greater Managing and Submitting (cluster 5), Blaming and Appeasing (cluster 6), and Neglecting and Avoiding (cluster 8) in their relationships with one another. Relative to control subjects, they were expected to show less Understanding and Expressing (cluster 2), Comforting and Enjoying (cluster 3), and Protecting and Relying (cluster 4) in their relationships. In addition, all three members of the bulimic-anorectic families were expected to use more complex and contradictory communications, including double-binds, when discussing the topic of the daughter's individuation than would their normal counterparts.

In general, the results supported the hypotheses. On self-report measures, in comparison with normal families, all family members of bulimic-anorectic families rated themselves and each other as more Belittling and Blaming (cluster 6), Attacking and Rejecting (cluster 7), and Ignoring and Neglecting (cluster 8) when focusing on one another (Other grid clusters). When reacting to each other (Self grid clusters), bulimic-anorectic family members rated themselves as more Sulking and Appeasing (cluster 6), Protesting and Withdrawing (cluster 7), and Walling Off and Avoiding (cluster 8) than did normal families. Also, in comparison with normal families, bulimic-anorectic families were less Affirming and Understanding (cluster 2), Nurturing and Comforting (cluster 3), and Helping and Protecting (cluster

4) when focusing on one another, and less Disclosing and Expressing (cluster 2), Approaching and Enjoying (cluster 3), and Trusting and Relying (cluster 4) when relating to each other.

Observational SASB data, which was coded as Other/Self interactions, revealed that families of bulimic-anorectics were more Belittling and Appeasing (cluster 6), and Ignoring and Walling Off (cluster 8), while they were less Helping and Trusting (cluster 4) and Nurturing and Approaching (cluster 3) than were their nondisturbed counterparts. These observational differences converge with the self report differences.

The parents of bulimic-anorectics were more Neglecting and Avoiding (cluster 8), Managing and Submitting (cluster 5), and Blaming and Appeasing (cluster 6), and less Comforting and Enjoying (cluster 3) and Protecting and Relying (cluster 4) than parents of normal teenagers. Bulimic-anorectics' parents showed greater Understanding and Expressing (cluster 2) with their daughters; however, it occurred more often as part of a disturbed, confusing communication than it did in normal families. Bulimic-anorectic daughters were significantly more Blaming and Sulking (cluster 6) and less Protecting and Relying (cluster 4) and Comforting and Enjoying (cluster 3) toward their parents than were normal control subjects. Observational data for parents of bulimic-anorectics was the opposite of self-report data on the Understanding and Expressing cluster.

Otherwise, observational differences for bulimic-anorectics and their parents also converge with the self-report differences.

Parents of bulimic-anorectics used more double-binding communication toward their daughters by juxtaposing the opposite messages of taking control and giving them autonomy. In sequential analysis, mothers of bulimic-anorectics were significantly more likely to move toward controlling their daughters from a variety of interpersonal positions than were normal mothers. The bulimic-anorectics themselves were ambivalent about submitting versus asserting themselves with their parents. Bulimic-anorectics repeatedly returned to hostile submission to their mothers significantly more often than normal teenagers did. Families of bulimic-anorectics were consistently more disturbed than normal control subjects, both in their perceived relationships and observed interactions between family members.

Consistent with Minuchin's theory, bulimic-anorectic families reported and were observed to have conflicted interactions (Belittling and Blaming, Attacking and Rejecting). However, responses were conflict avoiding rather than conflict resolving (Ignoring and Neglecting, Sulking and Appeasing, Protesting and Withdrawing, Deferring and Submitting). Bulimic-anorectic families also reported and were observed to have emotional disengagement and behavioral enmeshment (less Affirming and Understanding, Nurturing and Comforting, Helping and Protecting; more Watching and

Managing, Deferring and Submitting, double-binding). Bulimic-anorectic parents asserted rigid control, and the daughters eventually submitted.

Kog and Vandereycken (1989a) studied 60 intact families, 30 with an eating-disordered patient, and 30 matched controls with no one in the family receiving psychiatric treatment. Of the eating disordered clients, 25 were anorectic, and 5 were bulimic by DSM-III criteria. Six of the anorectics were bulimic-anorectics. All the families were asked to complete a decision-making task, a conflict-resolution task, and the Leuven Family Questionnaire. The authors sought to discover if the age group of the patient and the clinical symptomatology had a relationship to the family interaction concepts of cohesion, adaptability, and conflict.

The results indicated no effect for age. However, relative to control families, the eating disorder families showed more stability and discussed less openly disagreements between parents and children. On the remaining family measures, the anorectic (restricting and bulimic) and bulimic families had a completely opposite interaction pattern. In comparison to the anorectic families, the bulimic family showed strong interpersonal boundaries (disengagement), a less stable organization (disorganization), and less avoidance of disagreements (conflict escalation). The patients themselves also described their family as conflictual, lacking cohesion, and badly organized. The authors concluded that eating disordered and normal families

differ in interaction styles. However, an eating disorder family type could not be supported due to the opposite interaction patterns of anorectic and bulimic families.

Summary. Behavioral/observational studies have reported significantly more dysfunctional communication patterns among bulimic families than normals. As in the self-report studies, there is evidence that bulimic families are behaviorally enmeshed but emotionally disengaged. It appears that an eating disorder family type is not supported as different eating disorder groups manifest different dysfunctional interaction patterns. This may partially explain why the Humphrey (1987) study, which used bulimic-anorectic families, found eating disorder families to be conflict-avoidant and rigidly controlling while the Kog and Vandereycken (1989a) study, which used bulimic families, found the opposite pattern. The lack of an eating disorder family type suggests that interventions need to be tailored to the specific dysfunctional patterns manifested.

Discussion

The purpose of this review was to demonstrate that a family systems conceptualization of family dysfunction could be applied to bulimic families. In general, self-report and observational family characteristics studies support the hypothesis that bulimic families, like anorectic families, have significant systemic dysfunction in comparison with normal families. However, bulimic families appear to differ

from Minuchin's tightly-knit, rigid, and conflict-avoidant psychosomatic family model that typifies anorectic families. Instead, bulimic families are perceived as disorganized, that is, lacking in effective controls and coping with problems and change. They are also perceived as being conflict-escalating. Problem solving and communication are perceived to be impaired. Finally, bulimic families appear to be ambivalently enmeshed. In tasks, roles, and behaviors, members are seen as enmeshed. However, in emotional expression and support, members are viewed as disengaged.

When all family members provide data, some interesting patterns emerge. Parents of bulimics appeared to be double-binding about autonomy, giving opposite messages about giving freedom and taking control. This may partially explain the enmeshment-disengagement ambivalence in bulimic families as parents communicate that they want to control their daughter's behavior but abandon her emotionally. Interestingly, bulimics and their mothers perceived dysfunction in the family, but fathers did not. This may represent triangulation, with the parents in discord and the daughter being used to avoid their marital conflicts. However, the studies indicated that conflict is still a problem in these families. Given the general concordance of studies indicating family dysfunction in bulimic families, fathers of bulimics appeared to demonstrate a significant amount of denial.

Of note in these studies were two confounding variables: social class and clinical status. In the only study that made comparisons based on SES, eating disordered and normal families were indistinguishable on measures of conflict, cohesion, and disorganization in the upper social class. These are concepts from Minuchin's theory which he developed while working primarily with lower class families. It is possible that his psychosomatic family model may only apply to lower SES families. Researchers need to control for social class and to assess whether upper social class families differ in other ways from upper social class non-eating-disordered families.

Clinical status refers to whether or not a subject is in treatment. One study found no differences in family perceptions between nonclinical controls and nonclinical bulimics, who had been classified only by the BULIT but were not seeking treatment. As most studies compared bulimic families with nonclinical controls, it is not clear how bulimic families differ from other families who have at least one member receiving psychiatric treatment. Future researchers need to include non-eating-disordered clinical family controls to be able to make meaningful comparisons.

The majority of bulimic family characteristics research has been cross-sectional and correlational. If dysfunction is found in bulimic families, it is not certain if the dysfunction is the cause of or the result of the eating disorder, or the result of some unknown third factor that

also caused the eating disorder. Longitudinal studies need to be conducted on at risk children to determine etiological factors. Only one study has attempted this, a study by Attie and Brooks-Gunn (1989), but none of the subjects developed an eating disorder over the two years of the study.

Assessment devices for family dynamics in eating disorders are not standardized. Meaningful comparisons across studies are hampered by the lack of a common ground. In Table 1, 14 different family assessment devices were used, either singly or in conjunction with other devices, in 19 studies. Only three, the Family Environment Scale, the Leuven Family Questionnaire, and the Family Adaptability and Cohesion Evaluation Scale, share a common theoretical framework using concepts from Minuchin's psychosomatic family model. The rest appear to be diverse measures that must be reinterpreted before meaningful comparisons across studies can be made.

In choosing a standardized assessment device, the researcher needs to balance reliability, generalizability, comprehensiveness, and practicality. Self-report questionnaires are the easiest to administer and analyze. However, bulimic subjects may be influenced by social desirability to make their families look better (or worse) than they really are. In addition, denial and other reality distortions common in bulimics can bias results. Self-report measures can be administered to all family members and results compared for a more comprehensive picture. However,

once again social desirability and reality distortions may influence the results. In addition, different people will have different perceptions of a situation. This greatly complicates the interpretation of results as the researcher cannot be certain whose perceptions are most accurate or honest.

Observational and behavioral ratings can offer a more objective view, and they can provide a reality check for self-reports. Unfortunately, they are labor-intensive. Verbal and non-verbal behavior must be evaluated as well as sequential interactions. Several raters are needed, and they must be trained. Analysis of the results can be complicated. Finally, family behaviors in a laboratory may not be the same as natural behaviors. Nonetheless, observational and behavioral ratings combined with self-report measures provide a more comprehensive picture.

Ideally, family relationship research should employ a standardized battery of measures to insure convergent validity. It should include at least one self-report measure and one observational rating. In this way, reality distortions could be identified as well as the individual's own experience of his or her family. The measures should be atheoretical and behaviorally-based so that researchers from different theoretical orientations could utilize them. As utilized in the Humphrey (1987) study, Benjamin's Structural Analysis of Social Behavior seems to be the most appropriate and useful assessment device for family relationships

research. It has self-report and observational versions, focuses on many different interactional behaviors, and can fit different theoretical orientations. The model also can be used to inform treatment interventions.

Diagnostic categories for eating disorders in general need to be standardized. There is no consistent terminology, and new subtypes are coined continually. Part of the problem is that the research community has never agreed on what constitutes bulimia, and its diagnosis and criteria have changed from one DSM to the next. In addition, as mentioned previously, studies sometimes do and sometimes do not show differences between eating disorder groups and their subtypes. DSM-IV proposes to add the category Binge Eating Disorder, which is another name for compulsive overeating. Anorexia Nervosa will have two subtypes, restricting and bulimic. Bulimia Nervosa will include only those who binge and purge (Wilson & Walsh, 1991). Such categories do support the spectrum theory, with the disorders having different manifestations while sharing underlying unifying features. Nonetheless, this change will further complicate research.

Family relationships research indicates that there is family dysfunction in bulimic families. It would stand to reason, therefore, that family therapy would be recommended as the treatment of choice, just as it is for anorectic families. Family therapy outcome research, however, is limited. Only two outcome studies for family therapy with bulimic families have been published. First, Schwartz,

Barrett, and Saba (1985) treated 30 consecutive bulimic patients and their families. They reported that 66% had an outcome of one or fewer binge-purge episodes per month which was maintained at follow-up. Then, Russell, Szmukler, Dare, and Eisler (1987) randomly assigned bulimics to either individual or family therapy and obtained equivalent results between the two treatments at one-year follow-up. None of these studies have been replicated as yet, and none of them have utilized family assessment devices pre- and posttreatment to measure change in family dynamics. It appears that family therapy may be useful for bulimic families, but further outcome research is needed.

Future research in family characteristics of bulimia nervosa needs to improve in quality. It will require the use of appropriate controls, standardized measures, standardized diagnostic categories, multiple vantage points (self-report, observational), and longitudinal studies to determine the effect of early parenting styles versus autonomous, constitutional factors on the development of an eating disorder in an individual. More outcome studies are needed to determine specific family interventions that work with eating disordered families as opposed to other families with a member having a psychiatric disorder, as well as those that work with bulimic versus anorectic families. Such improvements in the quality and quantity of bulimic family relationships research would eventually help resolve the many

questions regarding family characteristics and treatment of bulimia nervosa.

REFERENCES

American Psychiatric Association (1987). Diagnostic and statistical manual of mental disorders (3rd-revised ed.). Washington, D.C.: Author.

Anderson, A. E. (1983). Anorexia nervosa and bulimia: A spectrum of eating disorders. Journal of Adolescent Health Care, 4, 15-21.

Attie, I., & Brooks-Gunn, J. (1989). Development of eating problems in adolescent girls: A longitudinal study. Developmental Psychology, 25(1), 70-79.

Boskind-White, M., & White, W. C., Jr. (1987/1983). Bulimarexia: The binge/purge cycle (2nd ed.). New York: W. W. Norton & Company.

Bruch, H. (1973). Eating disorders: Obesity, anorexia nervosa, and the person within. New York: Basic Books.

Bulik, C. M. (1987). Eating disorders in immigrants: Two case reports. International Journal of Eating Disorders, 6, 133-141.

Bulik, C. M., Sullivan, P. F., & Rorty, M. (1989). Childhood sexual abuse in women with bulimia. Journal of Clinical Psychiatry, 50(12), 460-464.

Foehrenbach, L. M., & Lane, R. C. (1989). Bulimia - Its dynamics and treatment: The case of an adolescent male. Journal of Contemporary Psychotherapy, 19(3), 183-202.

Garner, D. M., Rockert, W., Olmsted, M. P., Johnson, C., & Coscina, D. V. (1985). Psychoeducational principles in the treatment of bulimia and anorexia nervosa. In D. M. Garner & P. E. Garfinkel (Eds.), Handbook of psychotherapy for anorexia nervosa and bulimia (pp. 513-572). New York: Guilford Press.

Gurman, A. S., & Kniskern, D. P. (1971/1978). Research on marital and family therapy: Progress, perspective, and prospect. In S. L. Garfield & A. E. Bergin (Eds.), Handbook of psychotherapy and behavior change (pp. 817-901). New York: Wiley.

Gurman, A. S., Kniskern, D. P., & Pinsof, W. M. (1986). Research on the process and outcome of marital and family therapy. In S. Garfield & A. Bergin (Eds.), Handbook of psychotherapy and behavior change (pp. 565-624). New York: Wiley.

Hall, R. C. W., Hoffman, R. S., Beresford, T. P., Wooley, B., Hall, A. K., & Kubasak, L. (1989). Physical illness encountered in patients with eating disorders. Psychosomatics, 30(2), 174-191.

Holden, N. L., & Robinson, P. H. (1988). Anorexia nervosa and bulimia nervosa in British Blacks. British Journal of Psychiatry, 152, 544-549.

Holmgren, S., Humble, K., Norring, C., Roos, B. E., Rosmark, B., & Sohlberg, S. (1983). The anorectic bulimic conflict: An alternative diagnostic approach to anorexia nervosa and bulimia. International Journal of Eating Disorders, 2(2), 3-14.

Hsu, L. K. G. (1987). Are the eating disorders becoming more common in Blacks. International Journal of Eating Disorders, 6, 113-124.

Hsu, L. K. G. (1988). The outcome of anorexia nervosa: A reappraisal. Psychological Medicine, 18, 807-812.

Humphrey, L. L. (1987). Comparison of bulimic-anorexic and nondistressed families using structural analysis of social behavior. Journal of the American Academy of Child Psychiatry, 26, 248-255.

Kaplan, A. S., & Woodside, D. B. (1987). Biological aspects of anorexia nervosa and bulimia nervosa. Journal of Consulting and Clinical Psychology, 55, 645-653.

Kent, J. S., & Clopton, J. R. (1988). Bulimia: A comparison of psychological adjustment and familial characteristics in a nonclinical sample. Journal of Clinical Psychology, 44(6), 964-971.

Kog, E., & Vandereycken, W. (1989a). Family interaction in eating disorder patients and normal controls. International Journal of Eating Disorders, 8, 11-23.

Kog, E., & Vandereycken, W. (1989b). The facts: A review of research data on eating disorder families. In W. Vandereycken, E. Kog, & J. Vanderlinden (Eds.), The family approach to eating disorders: Assessment and treatment of anorexia nervosa and bulimia (pp. 25-67). New York: PMA Publishing Corp.

Kog, E., Vertommen, H., & Vandereycken, W. (1987). Minuchin's psychosomatic family model revised: A concept-validation study using a multitrait-multimethod approach. Family Process, 26, 235-253.

Kog, E., Vertommen, H., & Vandereycken, W. (1989). Self-report study of family interaction in eating disorder families compared to normals. In W. Vandereycken, E. Kog, & J. Vanderlinden (Eds.), The family approach to eating disorders: Assessment and treatment of anorexia nervosa and bulimia (pp. 107-117). New York: PMA Publishing Corp.

Krueger, H. K., & Bornstein, P. H. (1987). Depression, sex-roles, and family variables: Comparison of bulimics, binge eaters, and normals. Psychological Reports, 60, 1106.

Larocca, F. E. F., & Goodner, S. A. (1988). Eating disorders in the elderly: Transgenerational psychiatry. Clinical Gerontologist, 7(3/4), 137-153.

Lehman, A. K., & Rodin, J. (1989). Styles of self-nurturance and disordered eating. Journal of Consulting and Clinical Psychology, 57, 117-122.

Lieberman, S. (1989). A family with four bulimic children. International Journal of Eating Disorders, 8, 101-104.

Martin, J. E. (1989a). Bulimia: A literature review. British Journal of Occupational Therapy, 52(4), 138-142.

Martin, J. E. (1989b). Research methodology used in identifying bulimia. British Journal of Occupational Therapy, 52(5), 175-180.

Minuchin, S., Rosman, B. L., & Baker, L. (1978). Psychosomatic families: Anorexia nervosa in context. Cambridge, MA: Harvard University Press.

Mitchell, J. E., & Eckert, E. D. (1987). Scope and significance of eating disorders. Journal of Consulting and Clinical Psychology, 55, 628-634.

Mitchell, J. E., Hatsukami, D., Pyle, R. L., Eckert, E. D., & Soll, E. (1987). Late onset bulimia. Comprehensive Psychiatry, 28(4), 323-328.

Mitchell, J. E., Soll, E., Eckert, E. O., Pyle, R. L., & Hatsukami, D. (1989). The changing population of bulimia nervosa patients in an eating disorders program. Hospital & Community Psychiatry, 40(11), 1188-1189.

O'Neill, M. K., & White, P. (1987). Psychodynamic group treatment of young adult bulimic women: Preliminary positive results. Canadian Journal of Psychiatry, 32(2), 153-155.

Perednia, C., & Vandereycken, W. (1989). An explorative study on parenting in eating disorder families. In W. Vandereycken, E. Kog, & J. Vanderlinden (Eds.), The family approach to eating disorders: Assessment and treatment of anorexia nervosa and bulimia (pp. 119-146). New York: PMA Publishing Corp.

Piran, N., Lerner, P., Garfinkel, P. E., Kennedy, S. H., & Brouillette, C. (1988). Personality disorders in anorexic patients. International Journal of Eating Disorders, 7, 589-599.

Pole, R., Waller, D. A., Stewart, S. M., & Parkin-Feigenbaum, L. (1988). Parental caring versus overprotection in bulimia. International Journal of Eating Disorders, 7, 601-606.

Polivy, J., & Herman, C. P. (1987). Diagnosis and treatment of normal eating. Journal of Consulting and Clinical Psychology, 55, 635-644.

Prather, R. C., & Williamson, D. A. (1988). Psychopathology associated with bulimia, binge eating, and obesity. International Journal of Eating Disorders, 7, 177-184.

Root, M. P. P. (1989). Treatment failures: The role of sexual victimization in women's addictive behavior. American Journal of Orthopsychiatry, 59(4), 542-549.

Root, M. P. P., & Fallon, P. (1989). Treating the victimized bulimic: The functions of binge-purge behavior. Journal of Interpersonal Violence, 4(1), 90-100.

Root, M. P. P., Fallon, P., & Friedrich, W. N. (1986). Bulimia: A systems approach to treatment. New York: W. W. Norton & Company.

Russell, G. F. M., Szmukler, G. I., Dare, C., & Eisler, I. (1987). An evaluation of family therapy in anorexia nervosa and bulmia nervosa. Archives of General Psychiatry, 44, 1047-1056.

Rybicki, D. J., Lepkowsky, C. M., & Arndt, S. (1989). An empirical assessment of bulimic patients using multiple measures. Addictive Behaviors, 14, 249-260.

Sansone, R. A., Fine, M. A., Seuferer, S., & Bovenzi, J. (1989). The prevalence of borderline personality symptomatology among women with eating disorders. Journal of Clinical Psychology, 45(4), 603-610.

Scalf-McIver, L., & Thompson, J. K. (1989). Family correlates of bulimic characteristics in college females. Journal of Clinical Psychology, 45(3), 467-472.

Schneider, J. A., & Agras, W. S. (1987). Bulimia in males: A matched comparison with females. International Journal of Eating Disorders, 6, 235-242.

Schwartz, R. C. (1987). Working with "internal and external" families in the treatment of bulimia. Family Relations, 36(3), 242-245.

Schwartz, R. C., Barrett, M. J., & Saba, G. (1985). Family therapy for bulimia. In D. M. Garner & P. E. Garfinkel (Eds.), Handbook of psychotherapy for anorexia nervosa and bulimia (pp. 280-307). New York: Guilford Press.

Selvini-Palazzoli, M. (1978). Self-starvation: From individual to family therapy in treatment of anorexia nervosa (A. Pomerans, Trans.). New York: Jason Aronson.

Shisslak, C. M., Crago, M., Neal, M. E., & Swain, B. (1987). Primary prevention of eating disorders. Journal of Consulting and Clinical Psychology, 55, 660-667.

Shisslak, C. M., McKeon, R. T., & Crago, M. (1990). Family dysfunction in normal weight bulimic and bulimic anorexic families. Journal of Clinical Psychology, 46(2), 185-189.

Stein, D. M., & Laakso, W. (1988). Bulimia: A historical perspective. International Journal of Eating Disorders, 7, 201-210.

Stern, S. L., Dixon, K. N., Jones, D., Lake, M., Nemzer, E., & Sansone, R. (1989). Family environment in anorexia nervosa and bulimia. International Journal of Eating Disorders, 8, 25-31.

Strauss, J., & Ryan, R. M. (1987). Autonomy disturbances in subtypes of anorexia nervosa. Journal of Abnormal Psychology, 96(3), 254-258.

Strober, M., & Humphrey, L. L. (1987). Familial contributions to the etiology and course of anorexia nervosa and bulimia. Journal of Consulting and Clinical Psychology, 55, 654-659.

Swift, W. J., Ritholz, M., Kalin, N. H., & Kaslow, N. (1987). A follow-up study of thirty hospitalized bulimics. Psychosomatic Medicine, 49(1), 45-55.

Thelen, M. H., Farmer, J., Mann, L. M., & Pruitt, J. (1990). Bulimia and interpersonal relationships: A longitudinal study. Journal of Counseling Psychology, 37(1), 85-90.

Vandereycken, W. (1987). The constructive family approach to eating disorders: Critical remarks on the use of family therapy in anorexia nervosa and bulimia. International Journal of Eating Disorders, 6, 455-467.

Vandereycken, W. (1990). The addiction model in eating disorders: Some critical remarks and a selected bibliography. International Journal of Eating Disorders, 9, 95-101.

Vanderheyden, D. A., & Boland, F. J. (1987). A comparison of normals, mild, moderate, and severe binge eaters, and binge vomiters using discriminant function analysis. International Journal of Eating Disorders, 6, 331-337.

Vanderlinden, J., & Vandereycken, W. (1989). Overview of the family therapy literature. In W. Vandereycken, E. Kog, & J. Vanderlinden (Eds.), The family approach to eating disorders: Assessment and treatment of anorexia nervosa and bulimia (pp. 189-225). New York: PMA Publishing Corp.

Waller, G., Calam, R., & Slade, P. (1989). Eating disorders and family interaction. British Journal of Clinical Psychology, 28(3), 285-286.

Waller, G., Slade, P., & Calam, R. (1990a). Family adaptability and cohesion: Relation to eating attitudes and disorders. International Journal of Eating Disorders, 9, 225-228.

Waller, G., Slade, P., & Calam, R. (1990b). Who knows best? Family interaction and eating disorders. British Journal of Psychiatry, 156, 546-550.

Wilson, G. T., & Walsh, B. T. (1991). Eating disorders in the DSM-IV. Journal of Abnormal Psychology, 100(3), 362-365.

Yager, J. (1989). Psychological treatments for eating disorders. Psychiatric Annals, 19(9), 477-482.

Yeary, J. R., & Heck, C. L. (1989). Dual diagnosis: Eating disorders and psychoactive substance dependence. Journal of Psychoactive Drugs, 21(2), 239-249.

VITA

NAME

DeeAnne Karyl Lau

EDUCATION

Rosemead School of Psychology Clinical Psychology	Psy.D.	(Cand.)
Rosemead School of Psychology Clinical Psychology	M.A.	1985
Loma Linda University Psychology, French	B.A.	1983

INTERNSHIP

Richmond Area Multi-Services, Inc. San Francisco	1988 - 1989
Richmond Area Multi-Services, Inc. San Francisco	1987 - 1988

PRACTICA

Bilingual Family Services, Ontario, CA Outpatient Counseling	1986 - 1987
Camarillo State Hospital Psychology Extern	1987
Whittier College Counseling Service Outpatient Counseling	1985 - 1986
San Marino Unified School District School Psychology Trainee	1984 - 1985

EMPLOYMENT

Richmond Area Multi-Services, Inc. San Francisco	1989 - present
University of San Francisco Health and Counseling	1990
Research Assistant, Camarillo State Hospital	1986
Research Assistant, Rosemead School District	1985